

Amendment to the Claims:

The claims in this application, including their current status and changes made in this paper, are respectfully presented.

Claims 1 through 17 are canceled.

18 (previously presented). A receiver, comprising:

- a Fast Fourier Transform for transforming time domain values into complex amplitudes in the frequency domain;

- a buffer for supplying received time domain values to the Fast Fourier Transform according to a frame boundary;

- a correlator for correlating complex amplitudes of a synchronizing frame with a synchronizing pattern stored at the receiver to produce a correlation result;

- a derotation multiplier coupled to the correlator; and

- a frame synchronizer for, in response to the correlation result being below a predetermined value, adjusting the frame boundary by a time shift determined by performing a plurality of correlations between the stored synchronizing pattern and the complex amplitudes multiplied, in each one of the plurality of correlations, by a respective complex value representing a respective complex derotation of the complex amplitudes corresponding to a respective time shift of the synchronizing frame for that correlation.

19 (new). The receiver of claim 18, wherein the receiver is included within a Customer Premises transceiver.

20 (new). The receiver of claim 18, wherein the receiver is included within a Central Office transceiver.

21 (new). The receiver of claim 18, further comprising:

- a weighting multiplier, for applying a weighting coefficient to one or more of the complex amplitudes of the synchronizing frame according to whether the complex amplitude

corresponds to a tone of a discrete multitone modulation (DMT) that is to contribute to the correlation.

22 (new). The receiver of claim 21, wherein the weighting coefficient applied by the weighting multiplier to complex amplitudes corresponding to a tone that is not to contribute to the correlation is zero.

23 (new). The receiver of claim 22, wherein the weighting coefficient applied by the weighting multiplier to complex amplitudes corresponding to a tone that is not to contribute to the correlation is one.

24 (new). A transceiver, comprising:

a hybrid circuit, for coupling to a transmission path;

a discrete multitone (DMT) receiver, comprising:

a Fast Fourier Transform for transforming time domain values into complex amplitudes in the frequency domain;

a buffer for supplying time domain values, received via the hybrid circuit, to the Fast Fourier Transform according to a frame boundary;

a correlator for correlating complex amplitudes of a synchronizing frame with a synchronizing pattern stored at the receiver to produce a correlation result;

a derotation multiplier coupled to the correlator; and

a frame synchronizer for, in response to the correlation result being below a predetermined value, adjusting the frame boundary by a time shift determined by performing a plurality of correlations between the stored synchronizing pattern and the complex amplitudes multiplied, in each one of the plurality of correlations, by a respective complex value representing a respective complex derotation of the complex amplitudes corresponding to a respective time shift of the synchronizing frame for that correlation; and

a DMT transmitter, coupled to the hybrid circuit, for transmitting multicarrier modulation signals over the transmission path via the hybrid circuit.

25 (new). The transceiver of claim 24, wherein the DMT signals received over the transmission path are at a first bit rate;

and wherein the DMT signals transmitted by the DMT transmitter over the transmission path are at a second bit rate different from the first bit rate.

26 (new). The transceiver of claim 24, wherein the transceiver is a Customer Premises transceiver.

27 (new). The transceiver of claim 24, wherein the transceiver is a Central Office transceiver.